

REMARKS

Claim 1, 2, 8, and 9 have been amended. Claims 7 and 10 have been canceled. Claims 14-21 have been added. Thus, Claims 1-6, 8, 9, and 11-21 are pending in the present application.

Drawings and associated Specification:

Applicant amended the specification in paragraphs [0035] and [0036] to correctly state that the connection regions are part of the module housing as shown in Figures 1 to 3. These paragraphs inadvertently stated that the connection regions are part of the substrate.

Furthermore, Applicant submits an amended drawing sheet for approval by the Examiner. In Figure 2, the module housing has inadvertently be designated with numeral 2. However, Figure 1 clearly shows the relationship between housing and substrate regions. Thus, no new matter has been introduced.

Claim objections:

The Examiner objected to Claim 1 for lack of clearly stating the subject matter of the present invention. Applicant amended claim 1 accordingly.

Claim rejection under 35 USC §102(b):

The Examiner rejected claims 1-13 under 35 USC §102(b) as being anticipated by Kapnias. Applicant amended independent claim 1 to more clearly define the present invention. According to the present invention, a semiconductor module comprises a substrate which is divided into a plurality of separate substrate regions as shown, for example, in Figure 1. Adjacent substrate regions are connected by connecting regions which are designed in such a way that a movement of a substrate region does not translate to an adjacent substrate region. For example, heat created by a power semiconductor arranged on one substrate will cause expansion of the substrate. Such expansion could for example tilt the substrate region or cause lateral movement. Such a movement could translate into an even bigger movement if it directly affects an adjacent substrate or if only a single substrate with multiple components is used. According to the present invention, the connecting regions are designed flexible, for example they can be designed to comprise a slot as shown in Figure 2 which allows for a spring-like function of the

connecting region. Thus, a lateral movement of one substrate region will be compensated and will not translate to the next adjacent substrate region.

Kapnias merely discloses an semiconductor module according to the prior art. Only a single substrate 31 is provided on which a plurality of semiconductor devices 37-1 and 37-2 are arranged. Because only a single substrate is used any locally thermal expansion can translate through the whole substrate and cause deformations which due to single size substrate can be enlarged at different locations of the substrate. Only separate substrate elements and isolation of any movement with respect to adjacent substrate elements as claimed in independent claims 1 and 14 of the present invention can prevent such an effect.

CONCLUSION

The application as defined in the pending claims is patentable under 35 U.S.C. §102 and §103 in view of the cited prior art. Therefore, applicants respectfully request withdrawal of the rejection and allowance of all pending claims.

Applicants do not believe that any other fees are due at this time; however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be required for any reason relating to this document, the Commissioner is authorized to deduct the fees from Deposit Account No. 02-0383, (*formerly Baker & Botts, L.L.P.*) Order Number 074313.0105

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